Amdt. Dated December 10, 2004

Reply to Office action of September 23, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended). A linear measuring system for the recording of angular and position absolute values, where the scale includes, comprising:

a scale with a measurement track for generating absolute values which is recorded by an appropriate scanning head, wherein the said scale with the said measurement track is being a structured material characteristic or a structured surface on a material, wherein the said scale is composed of including at least two segments which are identically created for the generation of absolute values, and wherein at least one suitable track is being provided on the said scale for determining the absolute value of the particular segment reached by means of a further sensor arrangement; and wherein means of

a switching device are provided which use using the absolute value of the said segments and the calculated absolute value within the said segment to provide the total absolute value for further processing.

Claim 2 (currently amended). The measuring system according to claim 1, wherein the said at least one suitable track is at least one part of the said measurement track composed of one or more tracks.

Claim 3 (currently amended). The measuring system according to claim 1, wherein the said at least one suitable track is at least one parallel track applied onto the said scale.

Claim 4 (currently amended). The measuring system according to claim 1, wherein the particular said segments are designed formed with the same code sections.

Claim 5 (currently amended). The measuring system according to claim 3, wherein the <u>said</u> parallel track is <u>designed</u> formed for magnetic signal recording.

Claim 6 (currently amended). The measuring system according to claim 5, wherein the said parallel track contains permanent magnetic segments.

Claim 7 (currently amended). The measuring system according to claim 1, wherein further comprising an auxiliary power

battery outside and/or inside the said further sensor arrangement is provided for emergency supply.

Claim 8 (currently amended). The measuring system according to claim 1, wherein the absolute measuring system comprises said sensor arrangement includes at least two identical and staggered sensors (S1, S2) whose measured values are used for redundant signal evaluation by the an external control system.

Claim 9 (currently amended). The measuring system according to claim 1, wherein the <u>fundamental absolute</u> measuring system is based on optical, sound, ultrasound, magnetic, inductive, electromagnetic or capacitive measuring systems or a combination thereof.

Claim 10 (currently amended). The measuring system according to claim 1, wherein the absolute value of the segment reached (la to 1c) is determined by logical evaluation of the traversed segments (la to 1c) from a defined starting position.

Claim 11 (currently amended). The measuring system according to claim 1, wherein the said structured material characteristic is a patterned material characteristic.

Claim 12 (currently amended). The measuring system according to claim 1, wherein the said structured surface is a patterned surface.

Claim 13 (currently amended). The measuring system according to claim 1, wherein the said scale with the said measurement track is one of a structure and a pattern of a measuring object, the one of the structure and the pattern being provided substantially only in an operating range of sensors.

Claim 14 (currently amended). The measuring system according to claim 1, wherein the said scale with the said measurement track is a machined surface structure of a material.

Claim 15 (currently amended). The measuring system according to claim 1, wherein the said scale with the said measurement track is a lacquer layer structured with ultrasound.

Claim 16 (currently amended). The measuring system according to claim 1, wherein the <u>said</u> scale is provided underneath a surface of a measuring object such that the <u>said</u> scale can be detected by a sensor.